§84.1136

- (d) Mouthpieces shall be equipped with noseclips which are securely attached to the mouthpiece or respirator and provide an airtight seal.
- (e) Facepieces, hoods, and helmets shall be designed to prevent eyepiece fogging.
- (f) Half-mask facepieces shall not interfere with the fit of common industrial safety corrective spectacles, as determined by the Institute's facepiece tests in §§ 84.1141, 84.1142, and 84.1156(b).

§84.1136 Facepieces, hoods, and helmets; eyepieces; minimum requirements.

- (a) Facepieces, hoods, and helmets shall be designed and constructed to provide adequate vision which is not distorted by the eyepieces.
- (b) All eyepieces of gas masks combinations shall be designed and constructed to be impact and penetration resistant. Federal Specification, Mask, Air Line: and Respirator, Air Filtering, Industrial, GGG-M-125d, October 11, 1965, with interim amendment-1, July 30, 1969, is an example of an appropriate standard for determining impact and penetration resistance. Copies of GGG-M-125d may be obtained from the NIOSH, Certification and Quality Assurance Branch, 1095 Willowdale Road, Morgantown, WV 26505-2888.

§84.1137 Inhalation and exhalation valves; minimum requirements.

- (a) Inhalation and exhalation valves shall be protected against distortion.
- (b) Inhalation valves shall be designed and constructed and provided where necessary to prevent excessive exhaled air from adversely affecting filters, cartridges, and canisters, except where filters of dust, fume, and mist respirators are specifically designed to resist moisture as prescribed in \$84.1145.
 - (c) Exhalation valves shall be:
 - (1) Provided where necessary;
- (2) Protected against damage and external influence; and
- (3) Designed and constructed to prevent inward leakage of contaminated air.

§ 84.1138 Head harnesses; minimum requirements.

- (a) All facepieces shall be equipped with head harnesses designed and constructed to provide adequate tension during use and an even distribution of pressure over the entire area in contact with the face.
- (b) Facepiece head harnesses, except those employed on single-use dust, fume, and mist respirators, shall be adjustable and replaceable.
- (c) Mouthpieces shall be equipped, where applicable, with adjustable and replaceable harnesses, designed and constructed to hold the mouthpiece in place.

§84.1139 Air velocity and noise levels; hoods and helmets; minimum requirements.

Noise levels generated by the respirator will be measured inside the hood or helmet at maximum airflow obtainable and shall not exceed 80 dBA.

§84.1140 Dust, fume, and mist respirators; performance requirements; general.

Dust, fume, and mist respirators and the individual components of each such device shall, as appropriate, meet the requirements for performance and protection specified in the tests described in §84.1141 through 84.1152 and prescribed in Tables 12 and 13.

§84.1141 Isoamyl acetate tightness test; dust, fume, and mist respirators designed for respiratory protection against fumes of various metals having an air contamination level not less than 0.05 milligram per cubic meter; minimum requirements.

- (a) The respirator will be modified in such a manner that all of the air that normally would be inhaled through the inhalation port(s) is drawn through an efficient activated charcoal-filled canister, or cartridge(s), without interference with the face-contacting portion of the facepiece.
- (b) The modified respirator will be worn by persons for at least 2 minutes each in a test chamber containing 100 parts (by volume) of isoamyl-acetate vapor per million parts of air.
- (c) The odor of isoamyl-acetate shall not be detected by the wearers of the